Case Report:
Grounding on the James River

MSO Hampton Roads

Background

- Date: December 22, 2004
- Time of Grounding: 1915
- Vessel: Tug DAVIS SEA (80 ft) with a draft of 10 ft 5 inches
- Barge: tank barge DBL 19 (300 ft) holding 18,000 barrels of diesel
- Departing: Kinder Morgan Inc. (KMI)
- Destination: Piney Point, MD

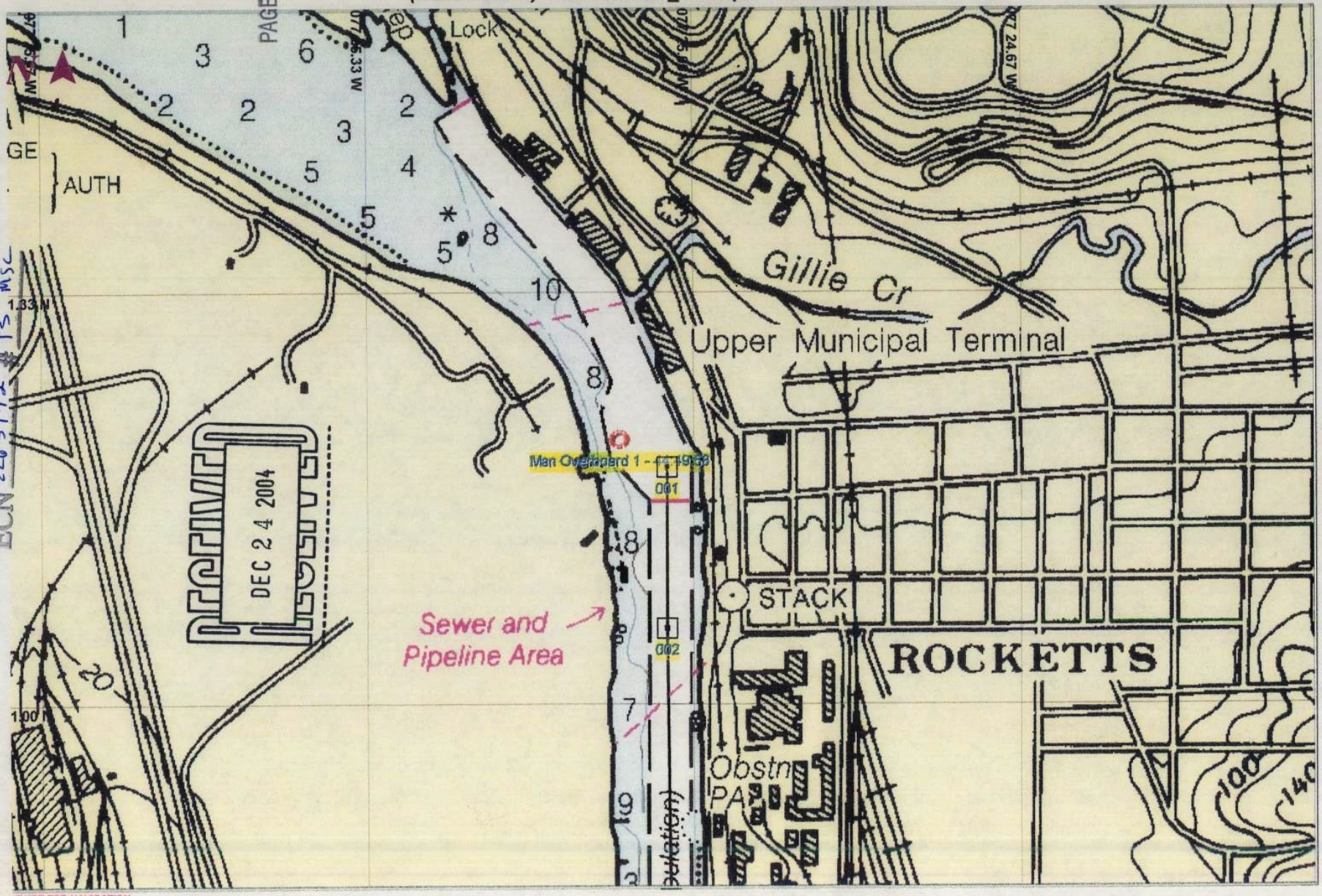
Trip Outline

- DAVIS SEA departs KMI up the James River toward Richmond (2.5 miles)
- Tug Captain determines need to use the Upper River Basin (or Richmond Harbor Turning Basin) to make turn for southbound transit
- Tug Captain assumes good water based on charted depth and previous trips

Trip Outline (cont'd)

- DAVIS SEA makes a turn to starboard with an ebb tide
- About ¾ into the turn, DAVIS SEA grounds the bow of tug and stern of barge in soft mud bottom
- Tug Captain immediately marked location on his electronic chart
- Grounding was in 6-7ft of water and well inside the channel

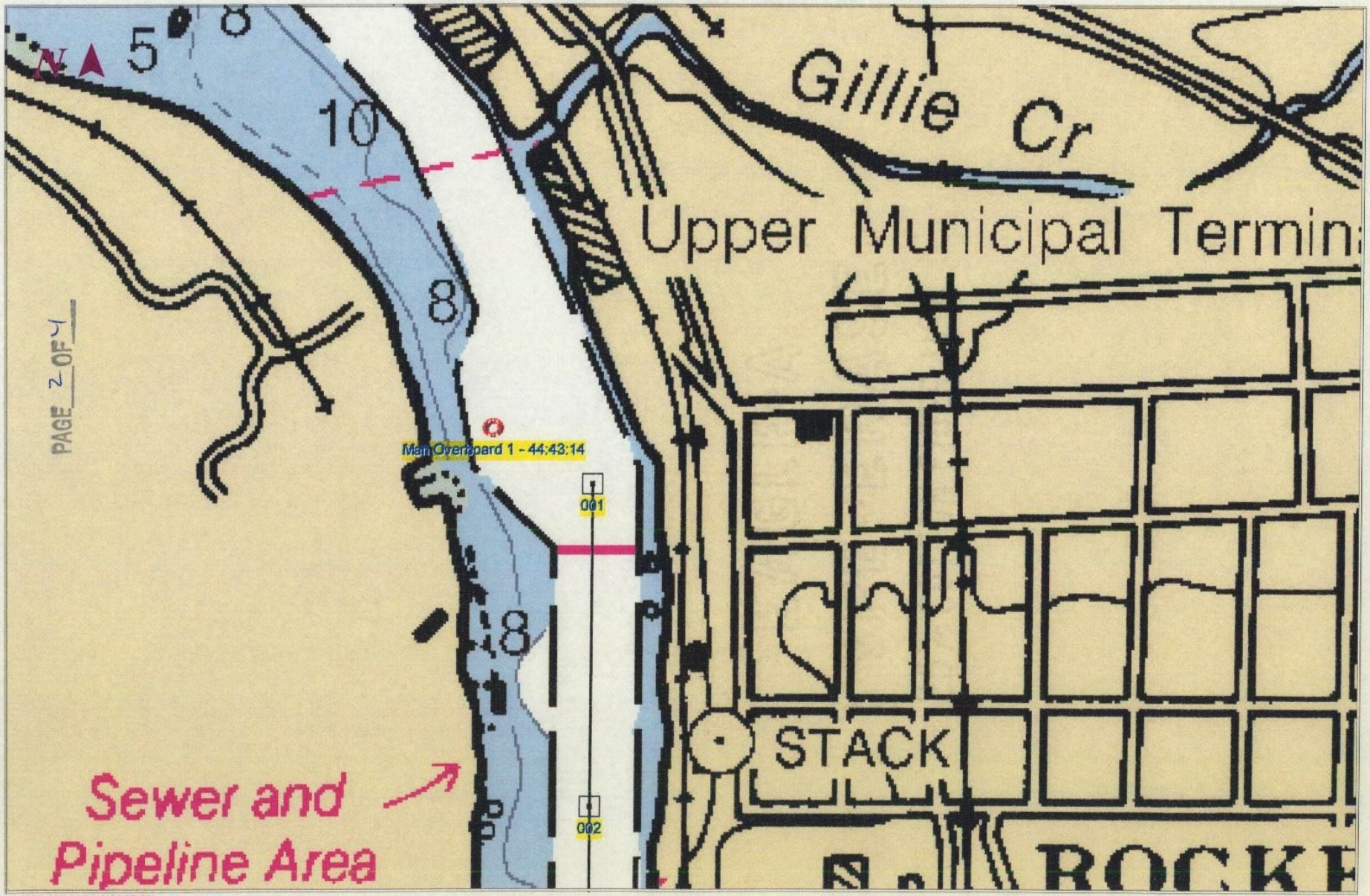
CHESAPEAKE BAY-SOUTHERN PART - 1 : 25,000
(NOAA Chart) Chart #12220_1 - Depth Units: FEET



ECN 2639772 #13 MSC

OT USE FOR NAVIGATION

RICHMOND EXTENSION - 1 : 12,500
(NOAA Chart) Chart #12252_2 - Depth Units: FEET



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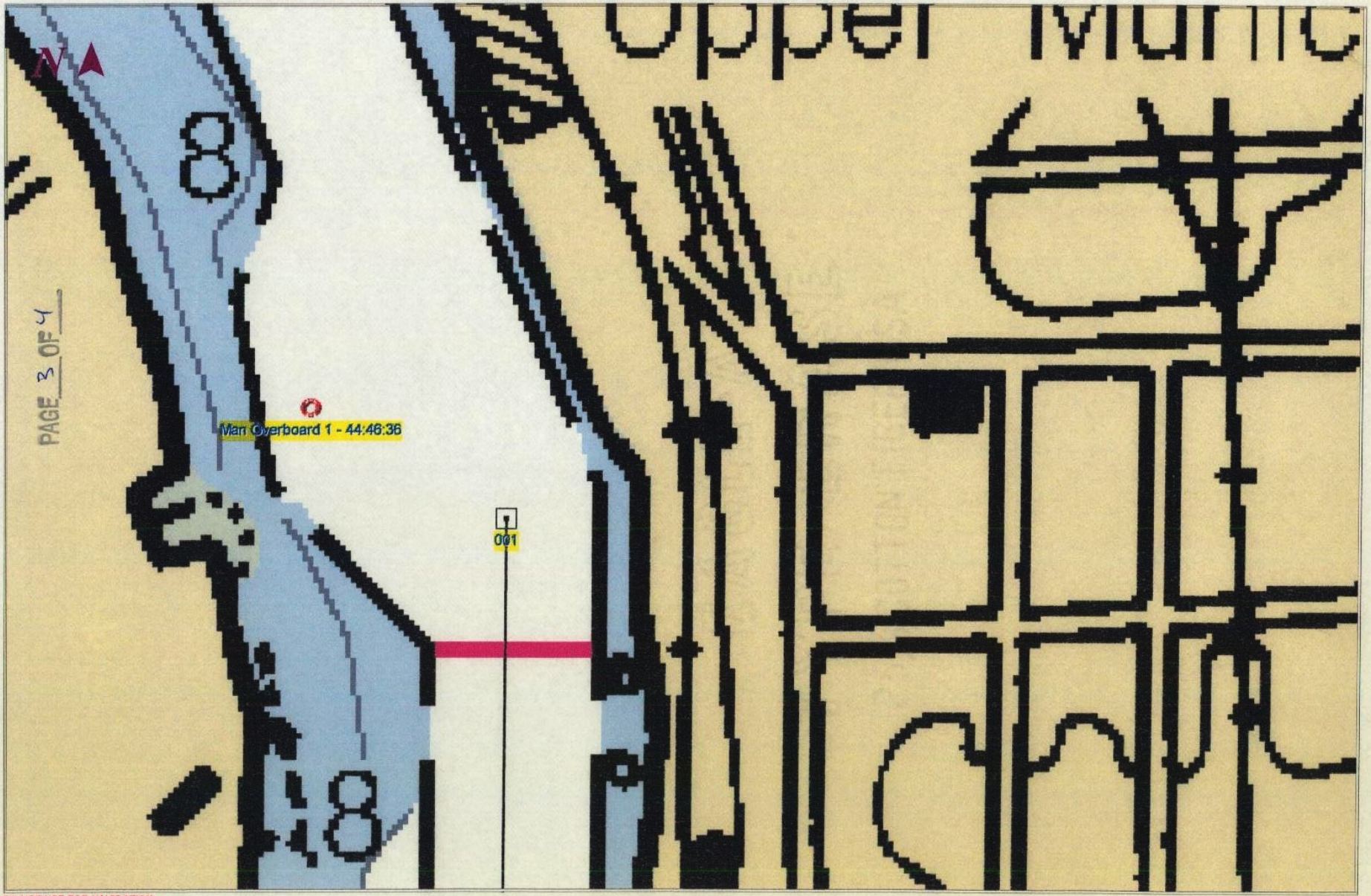
RICHMOND EXTENSION - 1 : 6,300
(NOAA Chart) Chart #12252_2 - Depth Units: FEET



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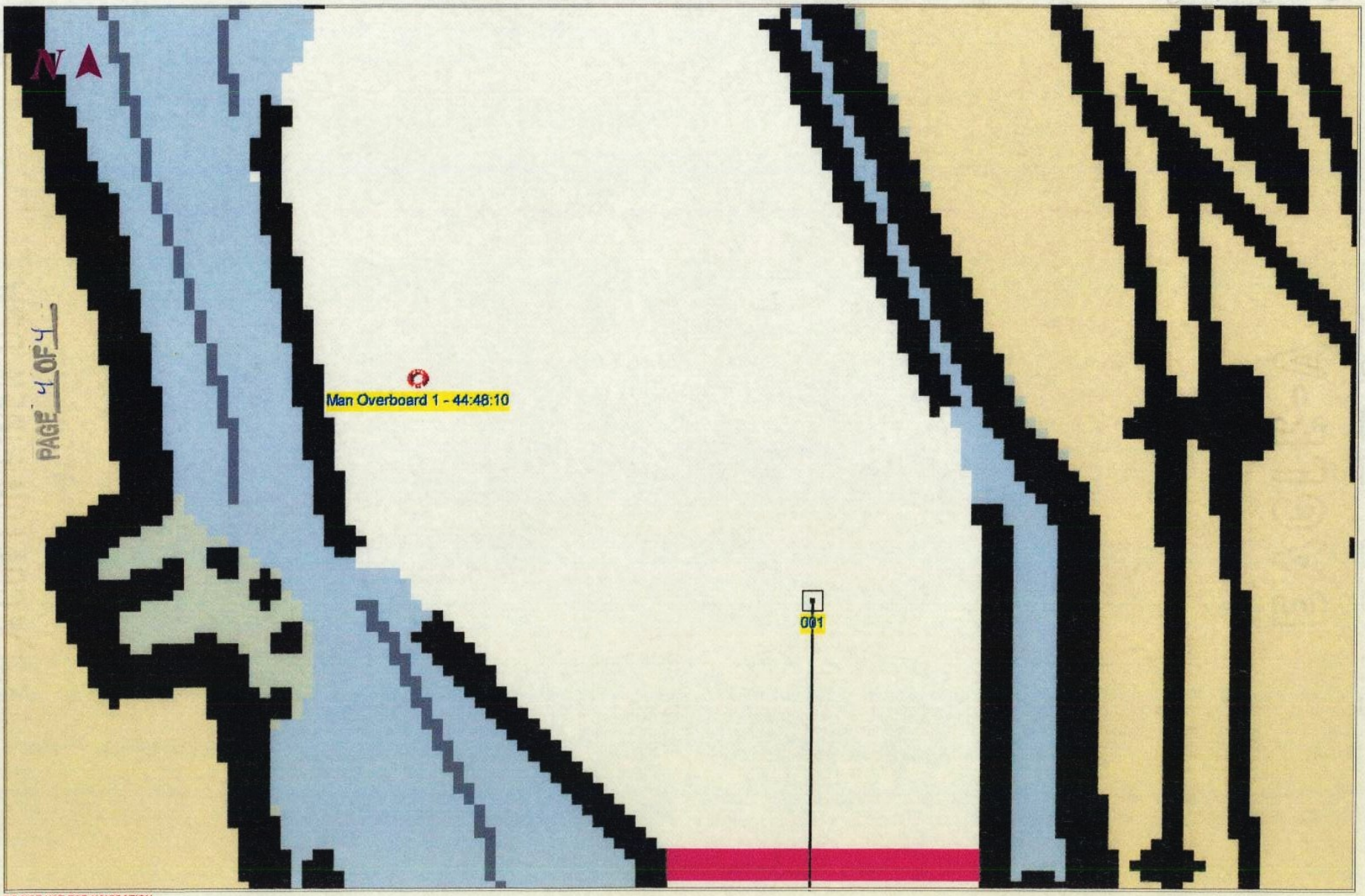
RICHMOND EXTENSION - 1 : 3,120
(NOAA Chart) Chart #12252_2 - Depth Units: FEET



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Additional Case Facts

- Weather: Clear skies and good visibility
- Crew: adequate sleep and alert
- Alcohol: sobriety test conducted (all results negative)
- Damage: minimal to tug and barge
- Final Result: DAVIS SEA refloated at next high tide (returned to KMI to complete Coast Guard investigation)

Turning Basin

- NOAA Chart #12220-1
- Richmond Harbor Turning Basin charted depth of 16.9 feet (MLLW) and a width of 140-175 feet
- Last dated survey was October 1999
- Suspected shoaling in basing from varied currents created by runoff from storms

Turning Basin Traffic

Facilities upstream of Richmond Deepwater Terminal:

1. International Matex Tank Terminals (I.M.T.T.)
2. Kinder Morgan Southeast Terminals Richmond (#2)

   (formerly Charter Triad)
3. Kinder Morgan Inc.

Vessel Operators:

1. Vane Brothers
2. C&M Towing
3. K-SEA Transportation
4. PENN Maritime

Turning Basin Traffic (cont'd)

Products:

- Liquid asphalt
- Diesel fuel
- Transmix (gasoline & diesel)
- Gasoline
- #2, #6, #4 oil

Future plans: K-SEA plans to move aviation fuel to IMTT

COTP Conclusion

"Although the DBL 19, carrying a full cargo of fuel oil, suffered only cosmetic damage, the *potential for a serious environmental incident in the James River is significant,* should another grounding lead to a hull breach."

From MSO Hampton Roads letter to USACE
(emphasis added)

Additional Questions?